Remarks/Arguments

Claim Status

The present Office Action (Paper No. 15) lists Claims 1–28 as pending, with Claims 15–28 being withdrawn from consideration. This appears to be a typographical error. The present application is a National phase of PCT application Serial No. 99/02114. According to the first Office Action in this application (Paper No. 6), Claims 1–20 were pending and subject to a restriction requirement. This paper also indicates that the Applicants provisionally elected to prosecute Claims 1–14 and that Claims 15–20 were withdrawn from consideration. The Applicants confirmed their election, with traverse, in Paper No. 7, and did not add any claims in that paper. Starting with Paper No. 8 and continuing to the present Office Action, there are said to be 28 pending claims. The Applicants assume that there was a typographical error in the preparation of Paper No. 8 and respectfully request that the Examiner point out where the additional eight claims were added or that the correct number of pending claims be used in future papers. In the current response, the Listing of Claims that starts on page 2 delineates 20 claims, with Claims 1–14 standing rejected under 35 USC § 103(a) and Claims 15–20 being withdrawn.

Claim Amendments

Claim 1 has been amended to describe both the core region and the chassis region as being breathable. Support for this amendment can be found at page 15, lines 34–36.

Rejections Under 35 USC § 103(a)

Claims 1–14 stand rejected under 35 USC § 103(a) as being unpatentable over Dobrin (US 5,628,737) in view of Morman, et al. (US 5,883,028). The Office Action admits that the Dobrin patent fails to disclose the use of a particulate filler material embedded in a polymeric film layer and asserts that the patent discloses all other aspects of the invention. Specifically, the Office action states that:

- The Dobrin patent discloses an absorbent article 20 (Figure 2) comprising a core region 74 and a chassis region 76 surrounding the core region.

- The articl 20 is said to also comprise a laminate 95 which extends into both the core region and the chassis region to form a core backsheet and a chassis backsheet. The laminate 95 is said to comprise a polymeric film layer 26 (col. 6, lines 42-43) and a fibrous layer 90 (col. 9, lines 51-52). The laminate 95 is said to also comprise apertures 84 in the chassis region 76. The Office Action asserts that the apertures 84 give the chassis region 76 a higher degrec of breathability than the core region 74, hence the MVTR in the core region 74 is asserted to be lower than the MVTR in the chassis region 76.

The Office Action goes on to state that the Morman reference discloses a breathable laminate for use as the backsheet of an absorbent article (col. 1, lines 5–8). The laminate is said to comprise a polymeric film layer 32 and a fibrous layer 12 where:

- The polymeric layer 32 has a basis weight that is greater than 25 gsm (col. 9, lines 63–65).
- The polymeric film layer comprises a polymeric matrix and a particulate filler material (col. 12, lines 28–31) which is said to inherently result in cracks in the polymeric layer formed around the particulate filler material.
- Mormon's laminate is said to have a high vapor permeability but reduces the passage of ammonia (col. 1, lines 49–67).

The Office Action concludes by asserting that it would have been obvious to construct the absorbent article of Dobrin with a backsheet comprising the laminate of Morman in order to reduce the passage of ammonia while retaining high vapor permeability.

Regarding individual claims, the Office Action asserts:

- **Claim 2:** Dobrin discloses that the polymeric film layer 26 is wider than the fibrous layer 90 (col. 10, lines 7–9).
- **Claims 3 and 4:** Morman discloses a MVTR of at least 1500 g/24hr/m^2 (col. 6, lines 14–18).

- **Claims 5 and 6:** While admitting that the Dobrin patent fails to disclose how much greater that transmission rate of the chassis region is than the transmission rate of the core region, the Office Action asserts that the chassis region has a higher transmission rate because the chassis region is apertured.
- **Claim 7:** Morman discloses the use of Calcium Carbonate as a filler at col. 13, lines 50–52.
- **Claim 8:** Morman discloses that the polymeric layer has a basis weight that is less than 50 gsm at col. 9, lines 63–65.
- **Claim 9:** Morman discloses that the fibrous layer has a basis weight of about 10 gsm at col. 11, line 45 which, when combined with the disclosure of the basis weight of the polymeric layer yields a laminate basis weight of less than 70 gsm.
- **Claim 10:** Dobrin discloses a nonwoven fibrous layer at col. 9, line 52.
- **Claim 11:** Morman discloses combining a polymeric layer and a fibrous layer at col. 9, lines 43–50.
- **Claim 12** Morman discloses combining the polymeric layer and the fibrous layer by extrusion at col. 10, lines 41–43.
- **Claim 13:** Morman discloses combining the polymeric layer and the fibrous layer by adhesive bonding at col. 9, lines 43–50.
- **Claim 14:** Dobrin discloses a baby diaper (Figure 1).

The Applicants respectfully direct the Examiner to the amendment to Claim 1 and submit that the combination of the Dobrin patent and the Morman reference fails to make the backsheet described therein obvious for at least the following reasons.

- A backsheet material combining the teachings of Dobrin and Morman would not be breathable in the core region. Specifically, a backsheet material combining the teachings of the Dobrin patent and the Morman reference would comprise a liquid impervious, non-apertured central region 74 (Dobrin

col. 6, lines 52–56) joined to an apertured outer region 76 (Dobrin col. 6, lines 56–59) that comprises Morman's laminate. The relationship between the non-apertured region (i.e., non apertured zone 82) and apertured regions (i.e., apertured zone 80) and the properties of the regions is further clarified at col. 7, line 50 to col. 8, line 19 of the Dobrin patent. The Applicants further note that, while the Dobrin patent indicates that the backsheet permits vapors to escape (col. 6, lines 41 and 42) there is no requirement that the entire backsheet be breathable and that it is clear from the design of the Dobrin backsheet that the vapors escape through apertured zone 80. Therefore, the Applicants respectfully submit that, because the Dobrin patent clearly teaches the core region (i.e., the central region 74) is non-apertured and that breathability is provided via the apertured zone 80 which lies outside the core region, the core region of a backsheet material comprising the teachings of Dobrin and Morman will not have a meaningful MVTR so it would not be considered breathable.

- A backsheet material combining the teachings of the Dobrin patent and the Morman reference would not have a unitary polymeric layer comprising a polymeric matrix and particulate filler embedded in the matrix. As noted above the Dobrin patent teaches that the central region 74 is non-apertured. Dobrin defines apertures at col. 8, lines 1–5 as follows:

> As used herein, the term "aperture" refers to any opening formed in a material that permits at least the passage of vapors. Suitable apertures may comprise slits, perforations, cuts, holes or any other opening or openings that permit the passage of vapor. The apertures 84 may take on any size and shape known in the art.

The Applicants submit out that this definition, when taken with the disclosure that a suitable material for the backsheet is a thermoplastic film with no reference to any embedded filler (col. 6, lines 42–44), clearly would lead one of ordinary skill to a core region made up of a material that is particulate free.

> Therefore, the core region of a backsheet combining the teachings of Dobrin and Morman cannot comprise a polymeric matrix with particulate filler embedded in the matrix. Further, since the Morman reference teaches that particulate can be added to the elastic sheet thereof (col. 9, lines 22–24), the only way a structure combining the teachings of Dobrin and Morman can be made is to join outer regions 76 comprising Morman's particulate-containing elastic material to a central region 74 comprising a particulate-free thermoplastic film. Since a backsheet comprising the teachings of Dobrin and Morman comprises two different materials it is not a unitary polymeric layer as defined in Claim 1 as amended.

In other words the combination cited in the Office Action fails to teach or suggest all of the limitations of Claim 1 as amended (MPEP § 2143.03). Thus:

1) For at least the above reasons, the Applicants have shown that the Office Action fails to establish a *prima facie* case of obviousness with respect to Claim 1 as amended.

2) Claims 2–14 depend from Claim 1 and have all the limitations of the base claim.

Therefore, the Applicants respectfully request that the Examiner reconsider the rejection of Claims 1–14 under 35 USC § 103 (a) over the combination of Dobrin and Morman, withdraw it and allow the claims.

In addition to the foregoing discussion, the Applicants further submit that the Office Action fails to establish a *prima facie* case of obviousness with respect to the rejection of certain dependent claims for the following additional reasons:

- **Claims 3 and 4** The Office Action asserts that the Morman reference discloses a MVTR of at least 1500 $g/m^2/24hrs$. The Applicants note that Claims 3 and 4 discuss MVTR in the core region of the claimed absorbent article and direct the Examiner to the discussion where they established that a backsheet combining the teachings of Dobrin and Morman would not be breathable in the core region and as a result would not have a meaningful

MVTR in that region. In addition, the Applicants respectfully point out that the method used to measure MVTR in Morman differs from the method used to measure MVTR in the present application. Specifically, Morman uses a "wet cup" method where loss in weight from a cup filled with water (the method does not say if it is distilled) is measured over 24 hours (col. 5, lines 10–55) while the present application uses a "dry cup" method where weight gain of a cup filled with a desiccant (anhydrous calcium chloride) is measured after exposure to a controlled humidity (75%) environment for 5 hours (page 18, line 1 to page 19, line 22). While there may be a correlation between the methods, one method cannot be relied on as predictive of a value of another method. Therefore, there is no showing in Morman that the materials described therein have any particular MVTR as measured using the "dry cup" method.

- **Claims 5 and 6:** With respect to the relative MVTR in the core region and the chassis region, the Applicants have established above that the core region is non-breathable so there is no basis for comparing relative MVTRs.

- **Claim 7:** The Applicants point out that the Calcium Carbonate-containing material discussed at col. 13, lines 50–52 of Morman is not a material of the Morman invention.

- **Claim 12:** Morman at col. 10, lines 41–43 is copied in its entirety below:

> Referring now to FIG. 3 of the drawings, there is schematically illustrated at 50 an exemplary process for forming a composite elastic necked-bonded material by a tensioned wind-up method.

As is clear, there is no reference to combining the layers by extrusion. At col. 8, lines 54–65, Morman does discuss forming a spunbonded embodiment of the neckable material or the elastic sheet without an intermediate step of winding the materials on a roll. However, the Applicants respectfully point out that extrusion coating is a well known process where one layer of a

laminate is deposited as a melt on the other layer and does not form into a web until after deposition. Conversely, the process shown in Figure 3 clearly shows the individual layers of Morman's laminate as being in web form before being combined. Net, there is no disclosure in Morman of extrusion coating. Therefore, relying on Morman to bring extrusion coating to a backsheet combining the teachings of Dobrin and Morman fails to establish a *prima facie* case of obviousness with respect to Claim 12.

Given that the Applicants have shown additional reasons why the Office Action fails to establish a *prima facie* case of obviousness with respect to Claims 3–7 and 12, they respectfully request that the rejection of these dependent claims be reconsidered and withdrawn and that Claims 3–7 and 12 be allowed even if the Examiner chooses to maintain the rejection of Claim 1 and other claims depending therefrom.

SUMMARY

All of the rejections in the Office Action have been discussed as have the distinctions between the cited references and the claimed invention. No new matter has been added by the Amendment. In light of the amendments to the claims and discussions contained herein, the Applicants respectfully request reconsideration of the rejections, their withdrawal, and allowance of all of the claims. Issuance of a Notice of Allowance at an early date is earnestly solicited.

Respectfully submitted,

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